



# **On-Road Trucking: Truck Toll Lanes**

**Turning a  
Competitive  
Advantage into a  
Win for  
Communities  
and Businesses**

# LA/Long Beach Port Complex is Largest in the U.S. and 5th in the World



# Ports Handle the Bulk of Asia – U.S. Containerized Trade

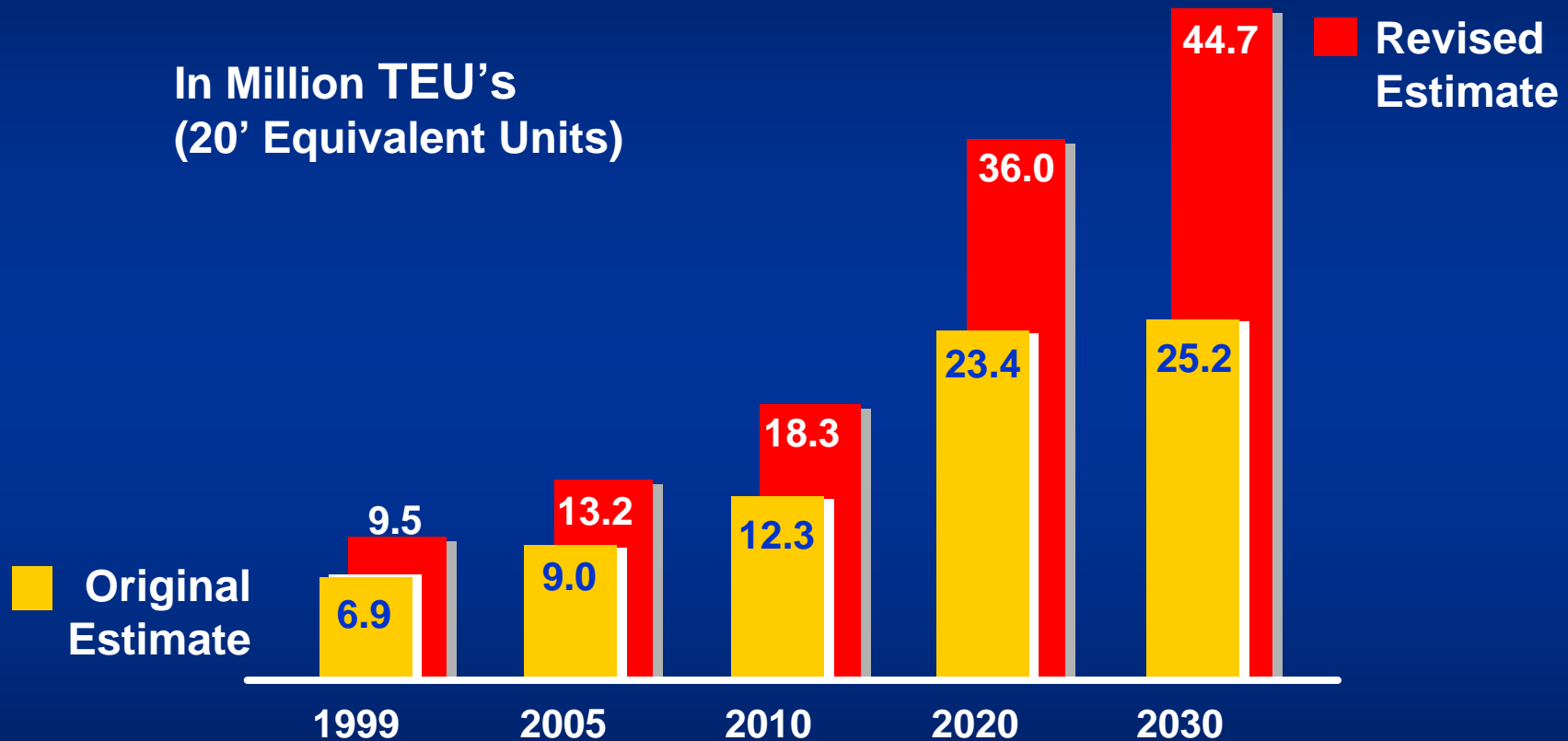
Port Region	Imports	Exports
LA-Long Beach	60.5%	39.7%
Other US West Coast	16.1%	30.8%
US Gulf + East Coasts	23.4%	29.5%

Shares measured on a TEU basis in 2003

Source: PIERIS, courtesy of MARAD

# Total LA/Long Beach Container Growth Projected to Triple in 25 Years

In Million TEU's  
(20' Equivalent Units)



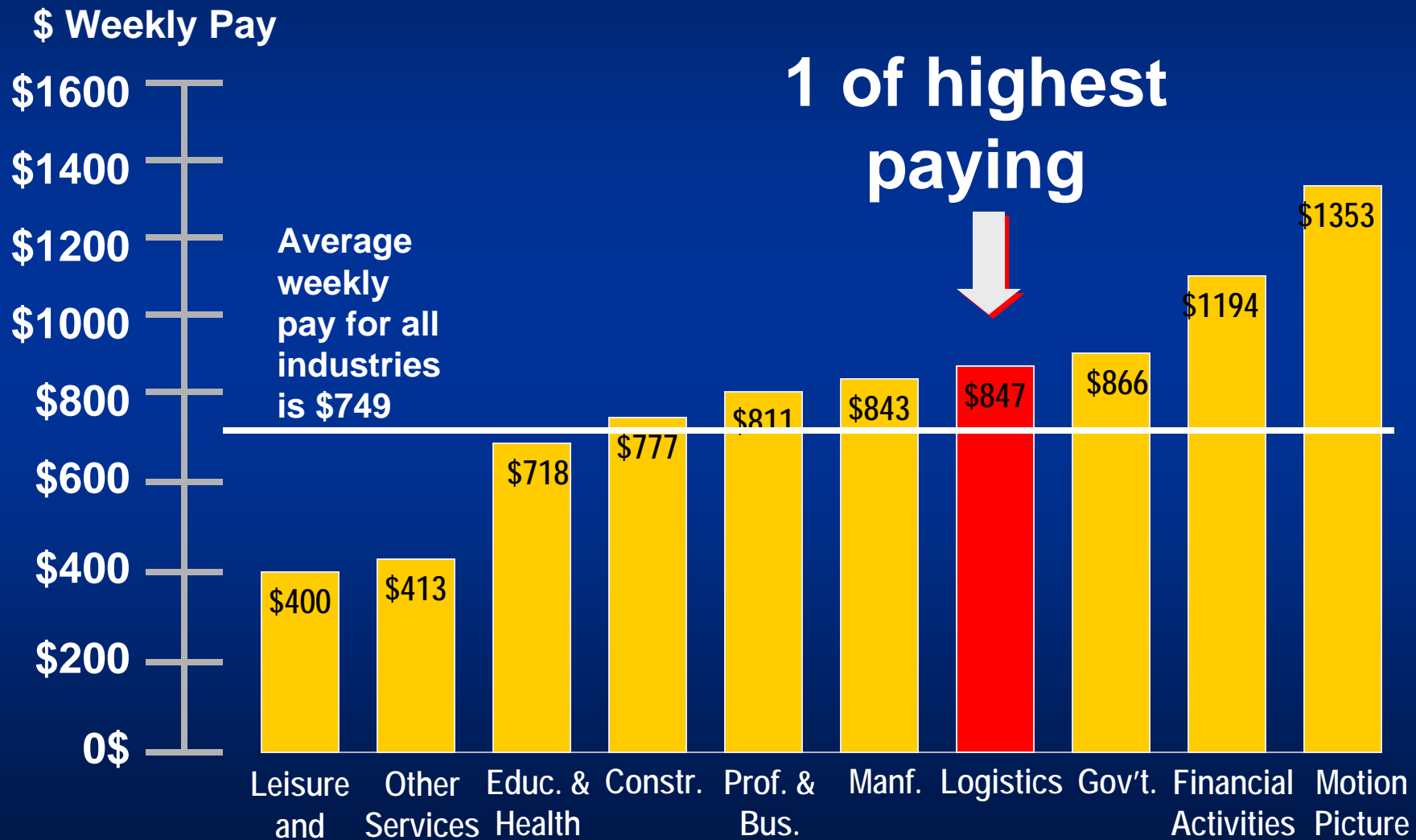
Source: POLA, POLB

# The Logistics Industry Provides Jobs to 8% of Southern Californians

% SCAG Jobs



# And Those Jobs Pay Well



# Job Growth in Logistics Could be Significant

## Logistics Investment, Job Creation, 2005-2030

<u>Activity</u>	<u>Job Creation</u>
Logistics Natural Growth	325,000
Logistics: Additional Growth Due To System Efficiency	95,000
Rail Capacity, Grade Separation, Truckway	277,000
Rest of Economy Growth: System Efficiency	83,000
Maglev LAX-ONT	91,000
Multiplier Impacts	<u>510,000</u>
	<b>1,381,000</b>

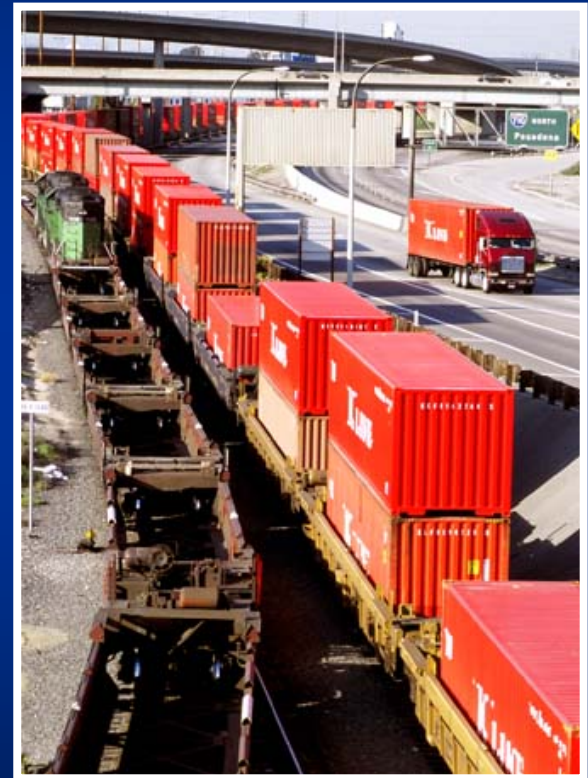
**good pay and upward mobility opportunities available  
to a growing blue collar labor force**

# **Landside Congestion is Putting Our Advantage in Jeopardy**

**By  
2025**



**Projected to nearly  
double**



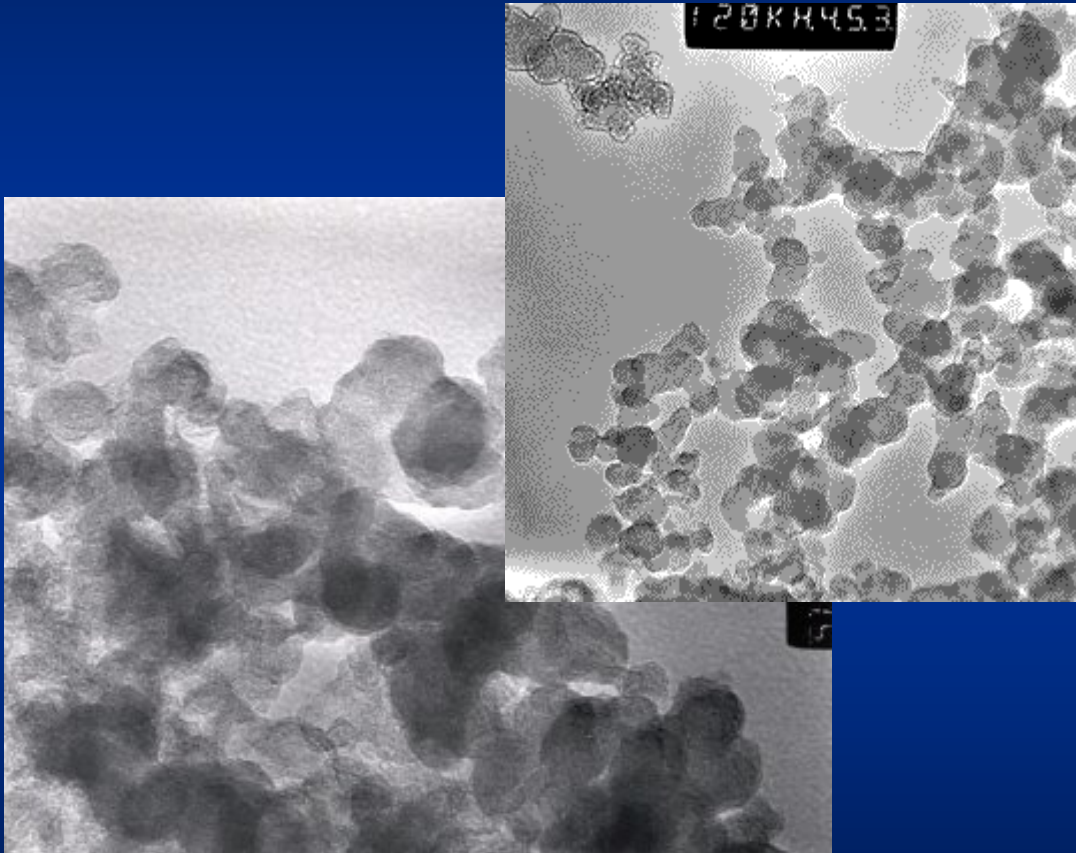
**Without improvements,  
nothing will be moving**

# The Pollutants it Creates are Putting Our Health in Jeopardy



- Progress has stalled and diesel emissions from ships, locomotives and port complex are projected to increase
- The mega-region continues to have the worst air quality in the U.S.

# Diesel Particulates Are at the Root of the Problem



They comprise  
**71%** of the  
major  
pollutants  
contributing to  
cancer risk in  
the South  
Coast Air  
Basin

Source: SCAQMD, Multiple Air Toxics Exposure Study II, March 2000

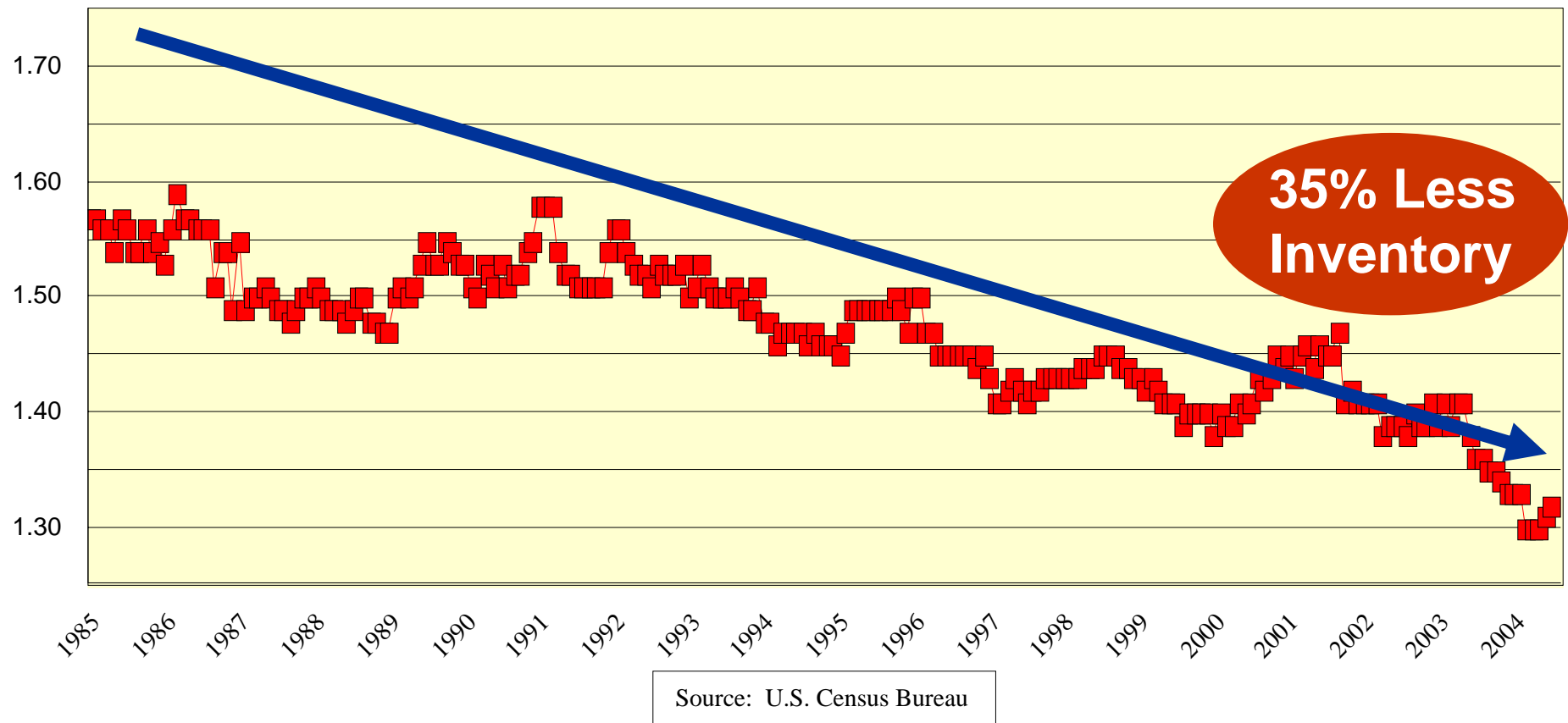
**Does the investment  
required to make  
transportation  
infrastructure  
improvements and employ  
clean air strategies make  
business sense?**

# Two Productivity Gains

- Shippers' inventory savings
- Transporters' efficiency gains

# Carrying Less Inventory Saves Money

## U.S. Inventory to Sales Ratios: 1985 - 2004



# **“Just-In-Time” Savings**

**The trans-loading of weekly shipments from Asia affords large, nation-wide retailers an 18-20% reduction in their total pipeline plus safety stock inventory compared to direct shipping from Asia.**

**Assuming a 6% average error in nationwide one-week-ahead sales forecasts**

Leachman & Associates LLC

# Consolidated Shipping Time Savings

Nation-wide  
order placed  
with Asian  
Factory

Fewer ships to  
select  
Trans-Loading  
Ports

Depart  
Destination  
Ports

Arrive at  
Destinations

Retail  
Stores



**DAYS OUT:**



# **“Just-In-Time” Savings**

**The savings amount to over  
\$1 Billion annually on inventory  
interest alone.**

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# **The investments and their price tags**

# Dedicated Truck Lanes



# Separated from Car Lanes



**Dedicated Right-of-Ways or Elevated Roadway**

# Air Quality Improvements

## Cost-effective emission reduction measures

Subsidize  
fleet  
modernization  
to alternative  
fuels



Scrap or  
retrofit dirty  
old vehicles  
and convert to  
clean fuels

Provide  
onshore  
electric power  
for ships at  
berth  
(Alternative  
Marine Power)



Focus  
investments  
to reduce  
emissions  
near people

# The Cost

In Billions

	Lanes/Tracks Only	Other Operational Improvements	TOTAL
Dedicated Truck Lanes	\$16.5	\$3.5	\$20.0
Additional Rail Tracks	\$3.4	\$2.6	\$6.0
		TOTAL	\$26.0
TOTAL with \$10B Environmental Mitigation			\$36.0

# The Public/Private Solution

Tax-Exempt  
Bonds and  
Tax Credit  
Financing  
to  
**BUILD**  
the facilities

Container  
Fees & Tolls  
to  
**USE**  
the facilities  
**AFTER**  
they are built

**What are speed and  
reliability worth to  
users of the system?**

# The Value of Time

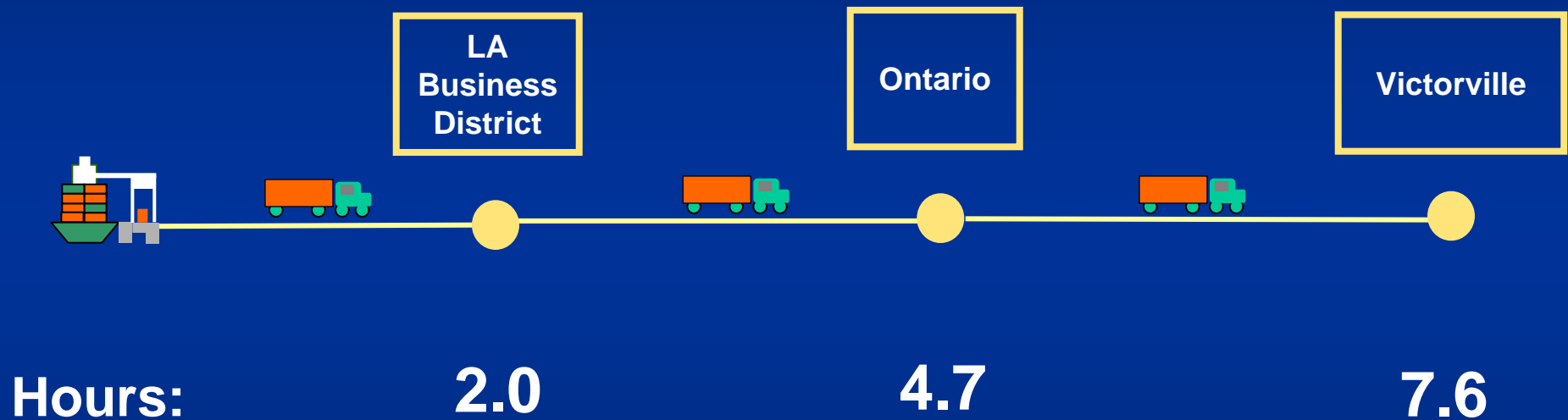
**Trucking  
Industry  
Value of  
time**

**\$25 to \$200  
per hour  
depending  
on cargo**

FHWA Freight Management and Operations: Measuring Travel Time in Freight-Significant Corridors,  
[www.ops.dot.gov/freight/time.htm](http://www.ops.dot.gov/freight/time.htm)

# Travel Time In the Year 2030

AM Peak Travel Planning Time\* in Hours

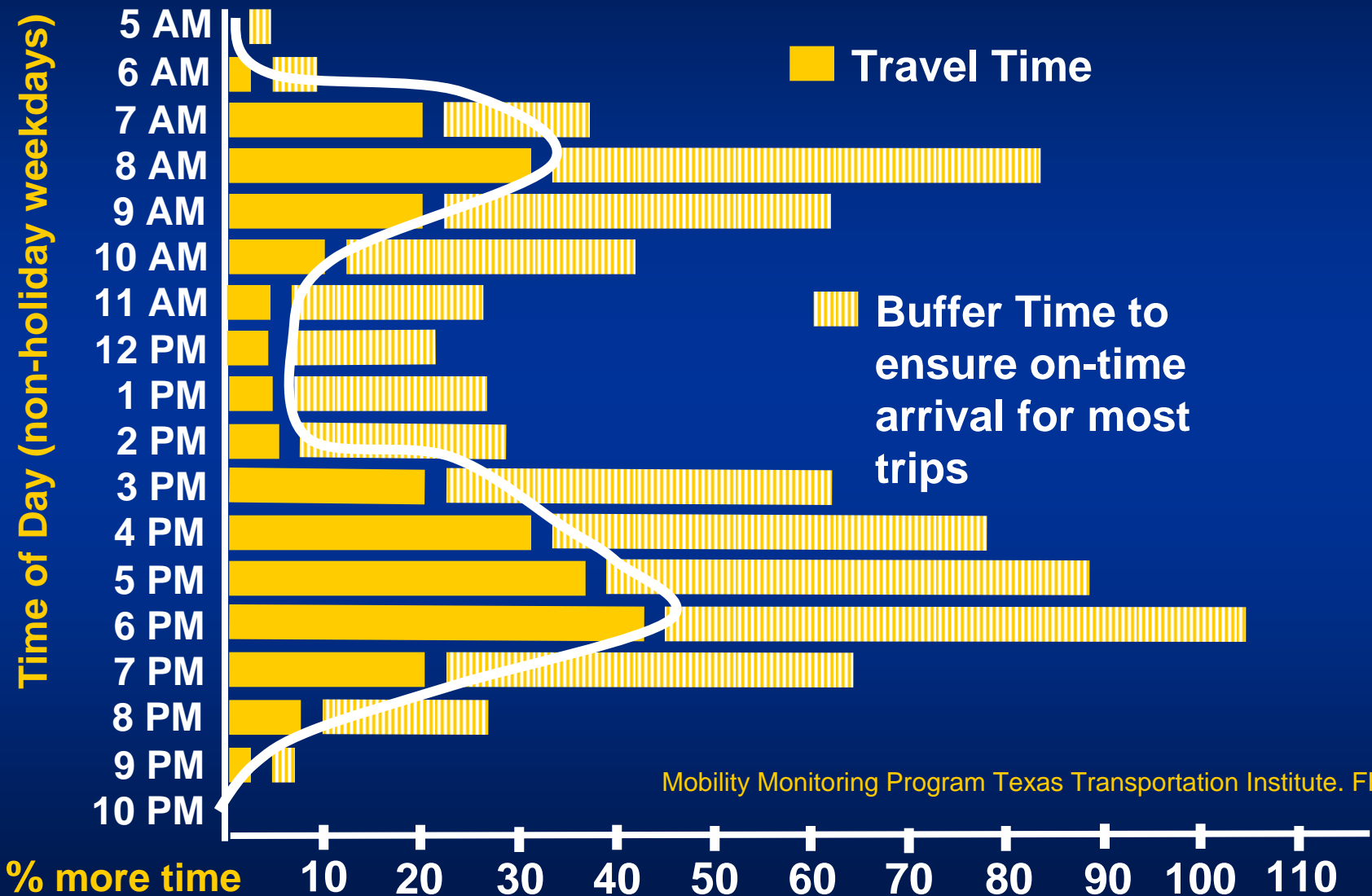


\*



# Planning Time in 2030

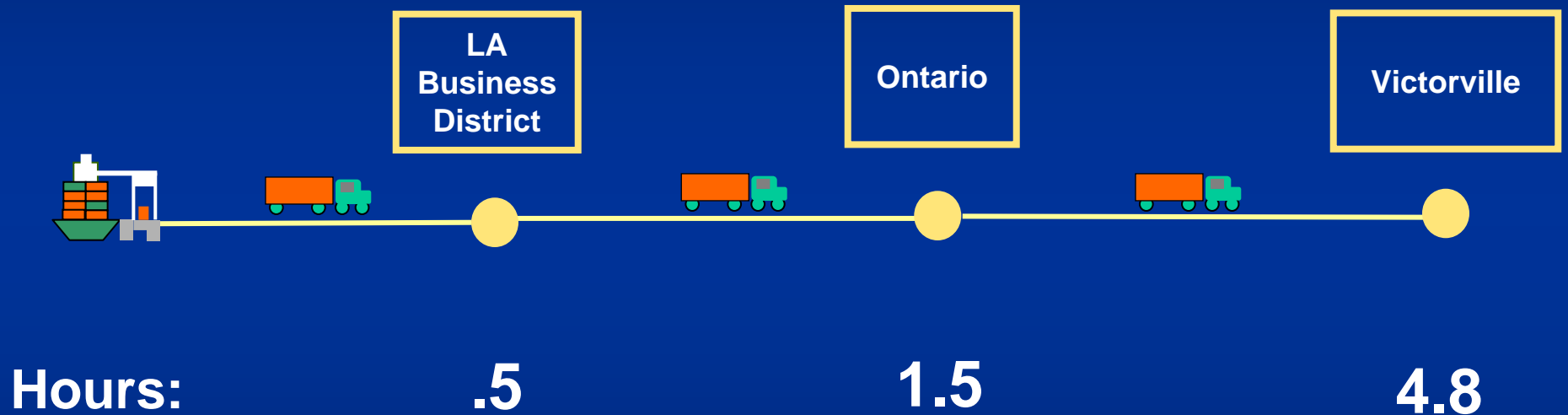
## Index by Time-of-Day



Mobility Monitoring Program Texas Transportation Institute. FHA

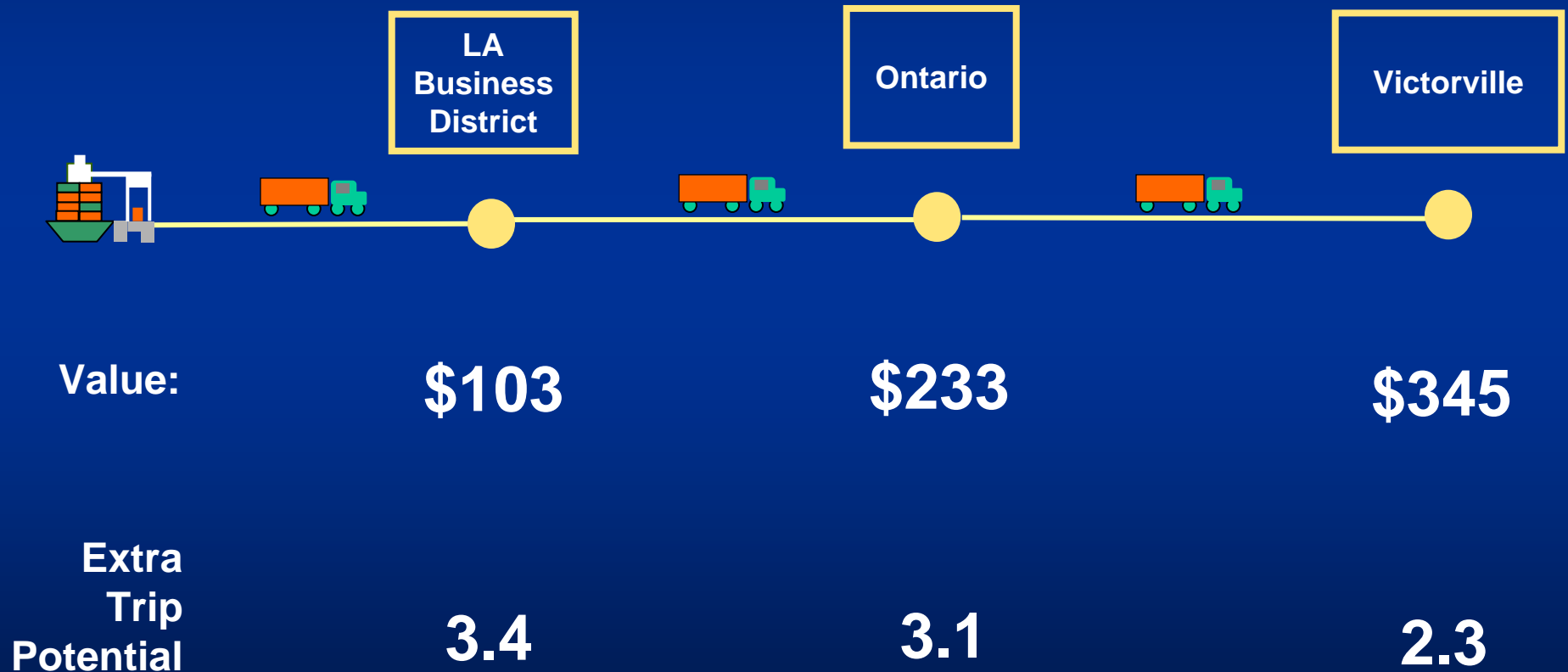
# In the Year 2030 with Truck Lanes

AM Peak Travel Planning Time in Hours



# Cash Value of Time Savings with Truck Lanes

AM Peak Travel @\$73 per hour



**If truckers paid an  
\$.86/mile toll to use the  
truckways, what would  
be their ROI?**

# Value of Infrastructure at A.M. Peak Travel Times - 2030

Warehouse District		Value @ \$73/hr	Toll @ \$.86/Mile	ROI per Trip after Toll	ROI Ratio
Downtown	To	\$103	\$17	\$86	6:1
	From	\$118	\$17	\$101	7:1
Ontario	To	\$233	\$32	\$201	7:1
	From	\$361	\$32	\$329	11:1
Victorville	To	\$345	\$64	\$281	5:1
	From	\$490	\$64	\$336	8:1

**\$1 Invested = \$5 to \$11 Return**

# Not Nearly Enough Federal and State Funds to Fix the Problems



- Dramatic growth in traffic is running head-long into limited transportation funding and high infrastructure improvement costs.

# Port & Modal Elasticity Study

## Key Study Finding:

Shippers are more sensitive to congestion (delay)  
than to the cost of transportation

Study Conducted by Leachman and Associates LLC - Sept. 2005

# Premise

- 1. Infrastructure improvements will reduce transit time for shippers and improve efficiency and reliability.**
- 2. Reliability has a real dollar value to shippers.**
- 3. The value of time saved will be significantly greater than the investment to achieve the time saved.**

# Two “What-If” Scenarios

## **As-Is Scenario**

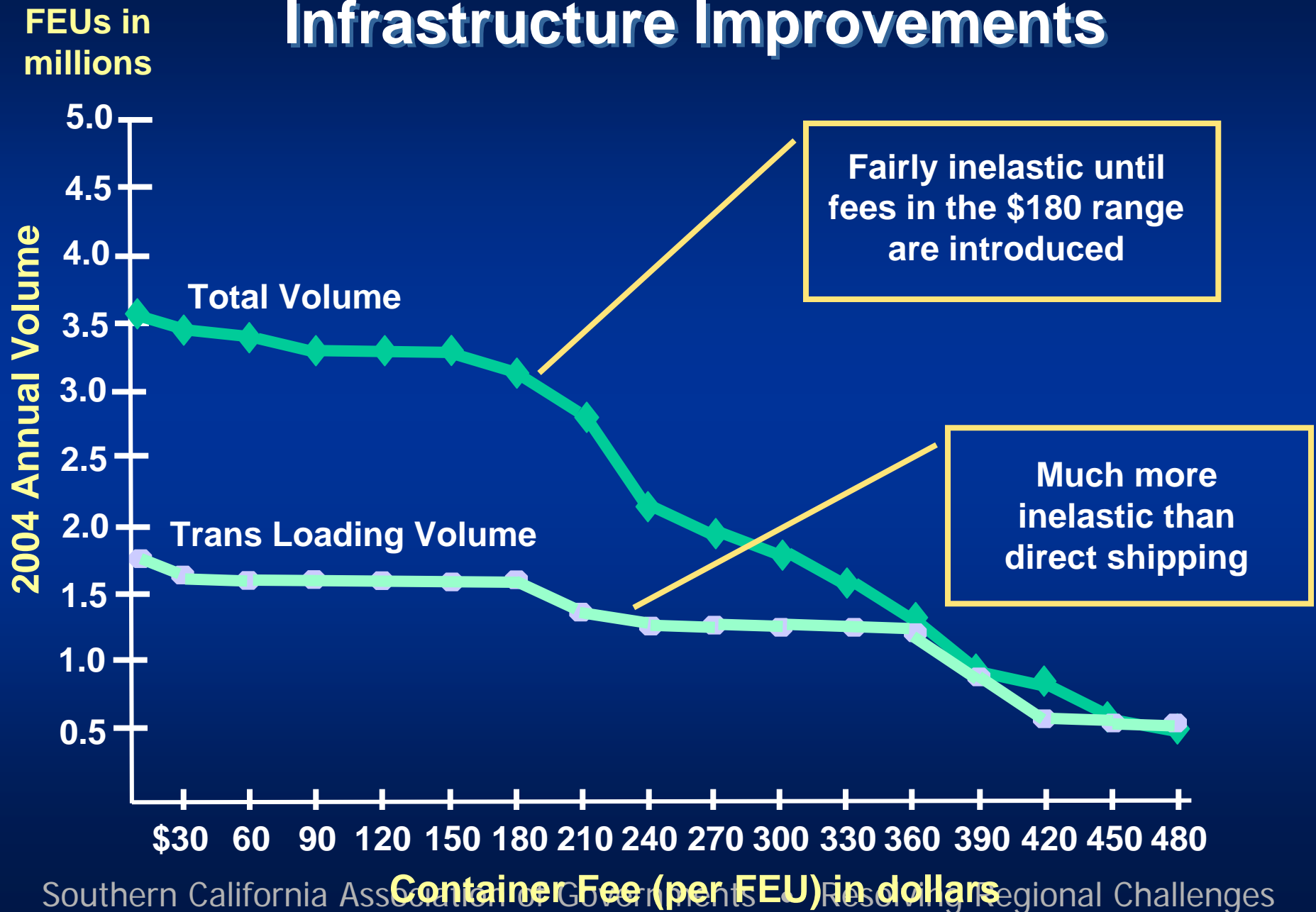
Fees imposed but NOT used to provide regional congestion relief

## **Congestion Relief Scenario**

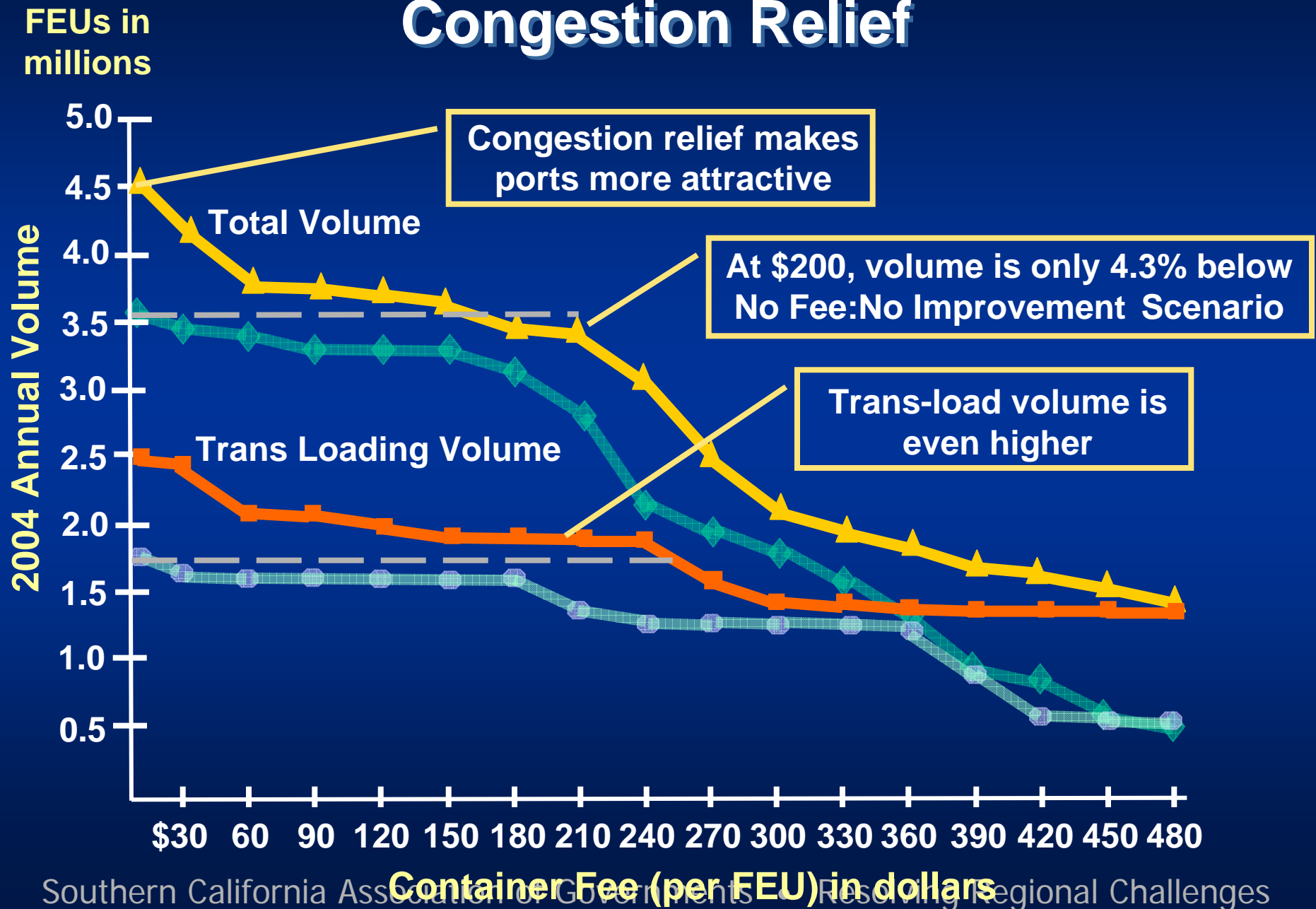
Fees and/or tolls paid by users of newly constructed highway and rail systems that provide regional congestion relief.

Study Conducted by Leachman and Associates LLC - Sept. 2005

# Fees Imposed with No Infrastructure Improvements



# Private Sector Investment in Congestion Relief





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## **Strategy for a Brighter Future**